LISTING OF CLAIMS:

Claims 1-15 (Cancelled)

16. (Previously Presented) In a method of producing a ball-and-socket joint (1) between a slipper (3) and a piston (2) of a piston machine, including the steps of:

a) configuring the slipper (3) with a joint ball (4) at an end opposite a bottom surface (21) thereof;

b) configuring the piston (2) at an oversized dimension (x) on a lateral surface (2c) and with a hemispherical joint recess (5) having a free recess edge (7) protruding beyond the maximum diameter (6) of the joint recess (5) at one end of the piston (2);

c) and finishing the lateral surface (2c) of the piston (2); the improvement comprising:

d) inserting the joint ball (4) into the joint recess (5) after finishing the lateral surface (2c) of the piston (2) as set forth in step c):

e) locally heating the free recess edge (7) to a temperature reducing the hardness of the material thereof; and

f) hot-beading the free recess edge (7) into a circumferentially converging configuration for confining said joint ball (4) within said joint recess (5).

17. (Previously Presented) In a method producing a ball-and-socket joint (1) between a slipper (3) and a piston (2) of a piston machine, including the steps of:

a) configuring the piston (2) at an oversized dimension (x) on a lateral surface and with a joint ball (4) at one end thereof;

b) configuring the slipper (3) with a hemispherical joint recess (5) having a free recess edge (7) protruding beyond the maximum diameter (6) of the joint recess (5);

c) and finishing the lateral surface (2c) of the piston (2); the improvement comprising:

d) inserting the joint ball (4) into the joint recess (5) after finishing the lateral surface (2c) of the piston (2) as set forth in step c):

e) locally heating the free recess edge (7) to a temperature reducing the hardness of the material subsequent to insertion of said joint ball (4) into said recess (5); and

f) hot-beading the free recess edge (7) into a circumferentially converging form in which said recess edge positively grips the joint ball (4) to inhibit egress of said joint ball from said joint recess.

18. (Previously Presented) A method according to Claim 16 or 17, wherein preceding finishing the lateral surface (2c) of the piston (2), the lateral surface (2c) is selectively nitrided, hardened, or gas-nitrided.

19. (Previously Presented) A method according to Claim 16 or 17, wherein the free recess edge (7) is hot-beaded into a conical form converging towards the free edge thereof.

Claims 20-29 (Cancelled).